Maths Test Study Notes (week 3 test)

Collecting the same: **ADDING AND SUBTRACTING**

* 5x + 3x + 7x = 15x (add the numbers with the same letter)
* 3x + 4b + 2x + 6b = 5x + 10b (add the x numbers together and b numbers together)
* 6x – 8x + 3m = -2x + 3m (your answer might be negative)

**MULTIPLICATION**

* 3a x 6b = 18ab (multiply the numbers and the letters)
* k x 7k = 7k squared (k by itself means 1k and k x k equals k squared)

**DIVISION**

* a divided by b = a/b
* 20x/5 = 4x (20 divided by 5 = 4)
* -6x/2x = -3 (divide the number first then the letter)

**MULTIPLICATION AND DIVISION**

* 6m x 3 / 9m = 18m / 9m = 2

**GROUPING SYMBOLS**

* a(b + c) = ab + ac (multiply **a** with b then with c)
* 2(2a + 3) = 4a + 6 (multiply 2 with 2a then multiply 2 with 3)

**WORKED EXAMPLES**

* m + 27 = 59

m = 59-27 (take 27 away from both sides)

m = 32

* 2a + 5 =7

2a = 7 – 5 (take 5 away from each side)

2a = 2

a = 1 (divide 2 from each side)

**Maths Facts**

* ab means a x b
* two negatives make a positive
* two positives make a positive
* a negative and a positive make a negative
* x cubed = x times x times x
* if a = 5 and b = 4 find the value of:

a – b = 5 – 4

= 1

* 3b = 21 what is b? b = 7